

CLAIMS

1. - 6. (Cancelled)

7. (Amended) A method for de-identification of records by and at a programmed client computer, comprising:

- providing records to the programmed client computer;
- locating personal identification data fields in each of the records;
- parsing the personal identification data fields;
- formatting the personal identification data fields;
- selecting at least a portion of the formatted personal identification data fields-;
- determining if the selected said at least a portion of the formatted personal identification data fields is to be encoded;
- encoding the selected said at least a portion of the formatted personal identification data fields that is to be encoded;
- deleting any of the personal identification data fields that are not selected; and
- one-way encrypting the encoded said at least a portion of the formatted personal identification data fields-selected.

8. (Original) The method of claim 7 further comprising:

- obtaining a mapping file; and
- locating personal identification data fields in each of the records using the mapping file.

9. (Cancelled)

10. (Amended) The method of claim 9 further comprising concatenating the encoded said at least a portion of the formatted personal identification data fields encoded with a seed value to provide seed value identifiers.

11. (Amended) The method of claim 9 wherein the encoded said at least a portion of the formatted personal identification data fields are not concatenated with a seed value prior to the one-way encrypting.

12. (Amended) The method of claim 7 wherein the one-way encrypting step comprises:
one-way encrypting with a first encryption algorithm the encoded said at least a portion of the formatted personal identification data fields selected to provide a first encryption result for each of the encoded said at least a portion of the formatted personal identification data fields selected; and

one-way encrypting with a second encryption algorithm the encoded said at least a portion of the formatted personal identification data fields selected to provide a second encryption result for each of the encoded said at least a portion of the formatted personal identification data fields selected.

13. (Amended) The method of claim 12 wherein the one-way encrypting step comprises:

concatenating at least a portion of each of the first encryption result and the second encryption result for each of the encoded said at least a portion of the formatted personal identification data fields to respectively provide binary string identifiers for the encoded said at least a portion of the formatted personal identification data fields; and

converting the binary strings to alphanumeric strings to provide match codes.

14. (Amended) A method for de-identification of records by a programmed client computer, comprising:

monitoring a file directory;
detecting presence of a new file in the file directory;
obtaining a mapping file for the new file;
locating personal identification data fields in records in the new file using the mapping file;
parsing the personal identification data fields;
formatting the personal identification data fields;

selecting at least a portion of the formatted personal identification data fields ~~formatted~~;
deleting any of the personal identification data fields that are not selected;
determining if the selected said at least a portion of the personal identification data fields ~~selected~~ are to be encoded;
encoding the selected said at least a portion of the personal identification data fields that are to be encoded;
concatenating the encoded said at least a portion of the personal identification data fields ~~encoded~~ with a seed value to provide seed value identifiers;
first one-way encrypting the seed value identifiers with a first encryption algorithm;
second one-way encrypting the seed value identifiers with a second encryption algorithm;
concatenating at least a portion of each one-way encryption result from the first one-way encrypting and the second one-way encrypting corresponding to the seed value identifiers to respectively provide binary strings for each of the seed value identifiers; and
converting the binary strings to alphanumeric strings to provide match codes;
wherein de-identified records comprising the match codes are created at the programmed client computer prior to transmission to a server computer.

15. - 22. (Cancelled)

23. (Amended) A computer readable media containing a program which, when executed by a programmed client computer, causes execution of a method comprising:

providing records to the programmed client computer;
locating personal identification data fields in each of the records;
parsing the personal identification data fields;
formatting the personal identification data fields;
selecting at least a portion of the formatted personal identification data fields ~~formatted~~;
determining if the selected said at least a portion of the formatted personal identification data fields is to be encoded.
encoding the selected said at least a portion of the formatted personal identification data fields that is to be encoded;

deleting any of the personal identification data fields that are not selected; and
one-way encrypting the encoded said at least a portion of the formatted personal
identification data fields ~~selected~~.

24. (Amended) A computer readable media containing a program which, when executed by a programmed client computer, causes execution of a method comprising:

- monitoring a file directory;
- detecting presence of a new file in the file directory;
- obtaining a mapping file for the new file;
- locating personal identification data fields in records in the new file using the mapping file;
- parsing the personal identification data fields;
- formatting the personal identification data fields;
- selecting at least a portion of the formatted personal identification data fields ~~formatted~~;
- deleting any of the personal identification data fields that are not selected;
- determining if the selected said at least a portion of the personal identification data fields
selected are to be encoded;
- encoding the selected said at least a portion of the personal identification data fields that
are to be encoded;
- concatenating the encoded said at least a portion of the personal identification data fields
~~encoded~~ with a seed value to provide seed value identifiers;
- first one-way encrypting the seed value identifiers with a first encryption algorithm;
- second one-way encrypting the seed value identifiers with a second encryption algorithm;
- concatenating at least a portion of each one-way encryption result from the first one-way
encrypting and the second one-way encrypting corresponding to the seed value identifiers to
respectively provide binary string for each of the seed value identifiers; and
- converting the binary strings to alphanumeric strings to provide match codes;
- wherein de-identified records comprising the match codes are created at the programmed
client computer prior to transmission to a server computer.

25. (Original) The method of claim 24 wherein the programmed client computer comprises a mapper program, a parser program, a formatting program and an encoding program.

26. - 37. (Cancelled)

38. (Previously Presented) A method for de-identification of records comprising:
 locating personal identification data fields in a plurality of records;
 parsing the personal identification data fields;
 deleting a first portion of parsed said personal identification data fields; and
 one-way encrypting a second portion of parsed said personal identification data fields to generate one or more de-identified records.

39. (Previously Presented) The method of claim 38 further comprising:
 selecting the second portion of parsed said personal identification data fields for one-way encryption.

40. (Previously Presented) The method of claim 38 further comprising receiving the personal identification data fields with a client computer.

41. (Previously Presented) The method of claim 38 further comprising providing the one or more de-identified records to a server computer.

42. (Previously Presented) The method of claim 38 further comprising formatting the personal identification data fields prior to one-way encrypting a second portion of said personal identification data fields.

43. (Previously Presented) The method of claim 38 further comprising:
 using a mapping file to locate the personal identification data fields in the plurality of records.

44. (Previously Presented) The method of claim 38 further comprising:
determining the second portion of parsed said personal identification data fields to be one-way encrypted in response to deleting the first portion of parsed said personal identification data fields.

45. (Previously Presented) The method of claim 44 further comprising concatenating the personal identification data fields that are one-way encrypted with a seed value to provide seed value identifiers.

46. (Previously Presented) The method of claim 38 further comprising comparing the one or more de-identified records with one or more master records to determine linkage between the one or more de-identified records and said one or more master records.

47. (Previously Presented) A system for de-identifying records comprising:
a client computer having an interface for receiving records, wherein the client computer is adapted to locate personal identification data fields in the records, delete at least a portion of the personal identification data fields, and encrypt remaining personal identification data fields to generate encrypted personal identification data fields.

48. (Previously Presented) The system of claim 47 further comprising a mapping file used to locate personal identification data fields in the records.

49. (Previously Presented) The system of claim 47 wherein said at least a portion of the personal identification data fields are encoded with a seed value to provide seed value identifiers.

50. (Previously Presented) The system of claim 47 wherein the encrypted personal identification data fields comprise one-way encryption with a first encryption algorithm to provide a first encryption result.

51. (Previously Presented) The system of claim 50 wherein the encrypted personal identification data fields comprise one-way encryption with a second encryption algorithm to provide a second encryption result.

52. (Previously Presented) The system of claim 51 wherein the one-way encryption with the first encryption result comprises concatenation of at least a portion of each of the first encryption result and the second encryption result for each of the personal identification data fields to respectively provide binary string identifiers for the personal identification data fields

53. (Previously Presented) The system of claim 52 wherein the binary strings are converted to alphanumeric strings to provide match codes.

54. (Previously Presented) A system for de-identification of records comprising:
means for locating personal identification data fields in a plurality of records;
means for parsing the personal identification data fields;
means for deleting a first portion of parsed said personal identification data fields; and
means for one-way encrypting a second portion of parsed said personal identification data
data
fields to generate one or more de-identified records.